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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,097	01/24/2001	Scott A. W. Muirhead	4075-000002	5415
7590 03/04/2004 Harness, Dickey & Pierce, P.L.C. P.O. Box 828 Bloomfield Hills, MI 48303			EXAMINER POPE, DARYL C	
			ART UNIT 2632	PAPER NUMBER

DATE MAILED: 03/04/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/770,097

Applicant(s)

MUIRHEAD, SCOTT A. W.

Examiner

DARYL C POPE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-74 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37-39, 41-49 and 69-71 is/are allowed.
- 6) ☒ Claim(s) 1-23, 28-35, 40, 50-68 and 72 is/are rejected.
- 7) ☒ Claim(s) 24-27, 36, 73 and 74 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 8.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 12
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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### DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### **ART REJECTION:**

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. **Claims 1-2,5-6, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by UmiKer(6,483,434).**

-- In considering **claim 1**, the claimed subject matter that is met by UmiKer includes:

- 1) the claimed part carrying apparatus comprising a part supporting structure is met by the casing as seen in figure 1;

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2) the claimed communications device being located entirely within the structure and prevented from external physical observation is met by the transponder chip(11) which is completely enclosed in the casing(see: column 6, lines 18-24).

-- **Claim 2** recites subject matter that is met as discussed in claim 1 above, as well as:

1) the claimed pallet is met by the casing(see: column 3, lines 62 et seq).

-- **Claim 5** recites subject matter that is met as discussed in claim 1 above, as well as:

1) the claimed structure including at least two sheets of material is met by the casing including first(1) and second(2) casing parts(see: 5, lines 63-65).

-- **Claim 6** recites subject matter that is met as discussed in claim 5 above, as well as:

1) the claimed communications device being located between the sheets of material is met(see: column 6, lines 45-51).

-- **Claim 10** recites subject matter that is met as discussed in claim 1 above, as well as:

1) the claimed communications device being a radio frequency identification tag is met(see: column 4, lines 64 et seq; column 5, lines 1-5).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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**5. Claims 3-4,7-9,11-23,28-35,40,50-68, and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over UmiKer.**

-- Claims 3-4,7-9,11-12,23,32 recite subject matter that is met as discussed in claim 1 above, except for:

1) the claimed two polymeric sheets(claims 3,7); the sheets being three-dimensionally shaped with heat(claim 4).

Although the use of polymeric sheets is not specifically stated by UmiKer, it is stated that the casing is preferably made of plastic material and capable of being processed by molding(see: column 4, lines 58-60) which constitutes heating and compression to form the device. Use of polymeric material in plastic is well known in the art, and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize polymeric material in the plastic casings of UmiKer since this would have provided a sturdier and more protective housing to the pallet of UmiKer, since a polymeric casings would have contained properties which would have better protected the transponder in the system.

Furthermore, it would have also been obvious that the sheets would have been three-dimensionally shaped with heat since UmiKer states that the plastic material used for the casing is processed by molding which often utilizes heat for the molding process.

-- In considering **claims 13-15 and 40**, since UmiKer discloses the device being a reusable transportation means including a chest or pallet, it would have been obvious that this device would have been a tank that would have allowed carrying of fluid or gasoline as desired, since the

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dimensions of the container, chest or pallet would have allowed transportation of various articles including fluid or gasoline as desired(see: column 2, lines 35-37)..

As well, all other claimed subject matter is met as discussed in claim 11 above.

-- **Claim 16** recites subject matter that is met as discussed in claim 11 above, as well as:

1) the claimed at least one of the sheets having multiple hollow legs formed to extend away from the other of the sheets is met by the indentations(10) as seen in figure 4.

-- **Claim 17** recites subject matter that was met as discussed in claim 11 above(see: column 3, lines 62 et seq).

-- **Claim 18** recites subject matter that was met as discussed in claim 11 above.

-- In considering **claim 19**, although only two sheets of plastic are utilized to make the casing in UmiKer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a third polymeric sheet or any number of polymeric sheets as desired since one of ordinary skill would have recognized the appropriate number of sheets that would have provided the most desirable device during the assembling of the device into a three dimensional shape.

As well, all other claimed subject matter is met as discussed in claim 11 above.

-- **Claim 20** recites subject matter that is met as discussed in claim 11 above, as well as:

1) the claimed communications device being an interrogator is met(see: column 2, lines 4-25).

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-- In considering **claim 21-22**, although specific use of an adhesive for securing the communications device is not shown by UmiKer, UmiKer does utilize fused plastic material which molds into an encapsulating bond which keeps the transponder(11) in place(see: column 6, lines 52 et seq). Therefore, it would have been obvious that some form of adhesive properties would have been included in the fused plastic material since the material would have adhered itself to the transponder so as secure the transponder in the casing.

Furthermore, it would have also been obvious that the plastic material would have constituted a substrate that the circuit would have been mounted on mounted to at least one of the sheets, and that one of ordinary skill in the art would have recognized the desirability of the substrate having specific heat deflection capability such as above 600 degrees Fahrenheit, since the case would have been subjected to various environmental conditions, and therefore one of ordinary skill would have desired that the communications device be protected from those conditions as best as possible.

As well, all other claimed subject matter is met as discussed in claim 11 above.

-- **Claim 28** recites subject matter that is met as discussed in claim 23 above, as well as:

1) the claimed external interrogator operably communicating with the communications device is met by the read/write units which communicate with the transponder chip(see: column 2, lines 1, lines 39-46).

-- **Claims 29-30** recite subject matter that is met as discussed in claim 23 above(see: column 3, lines 62-63).

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-- In considering **claim 31**, although not specifically shown by UmiKer, use of power supply means including batteries for enclosed transceiver devices is well known in the art, and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a battery located within the pallet and externally accessible and replaceable from outside the pallet into the device of UmiKer, since this would have provided a well known, reliable, and unobtrusive power supply means so as to help ensure proper operation of the transponder chip since a power source would have been available for the chip.

As well, all other claimed subject matter is met as discussed in claim 23 above.

-- **Claims 33-35** recite subject matter that is met as discussed in claim 32 above(see: column 3, lines 62-63).

-- **Claims 50-58,60-68**, and **72** recite methods that are met as discussed with reference to the discussion of the apparatus of the claims above.

-- In considering **claim 59**, use of robotics for manufacturing devices is well known in the art, and therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a robot manufacturing means so as to robotically and automatically locate and attach the communications device to the sheet, since this would have helped reduce human error during the manufacturing aspect of the device.

As well, all other claimed subject matter is met as discussed in claim 50 above.



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***Allowable Subject Matter***

6. **Claims 24-27,36, and 73-74** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
7. **Claims 37-39,41-49 and 69-71** are allowed.

**REMARKS:**

8. Due to the incompleteness of the previous office action dated 11/19/02, a more thorough and complete examination has been performed and this office action has been provided. The applicants response time period will be reset to 3 months from the mailing date of this office action.

***Conclusion***

9. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314(for formal communications intended for entry)

and as well:

(703) 872-9314(for informal or draft communications, please label

“PROPOSED” or “DRAFT”)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

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Drive, Arlington, VA., Sixth Floor (Receptionist).


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daryl C. Pope whose telephone number is (703) 305-4838. The examiner can normally be reached on M-Th from 7:30 to 6:00 since the examiner works on a compressed work schedule in which every Friday is the examiner's day off.

**All interviews requested, whether personal or telephonic, are to be scheduled for times between 11:00 a.m. and 5:00 p.m. between Tuesdays-Thursdays.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu, can be reached on (703) 308-6730. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Daryl C. Pope



DARYL POPE  
PRIMARY EXAMINER

Jan. 20, 2004